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|-------------------------------|-----------------|---------------|--|
| Notice of Allowability | Application No. | Applicant(s) | |
| | 10/056,950 | KHAWER ET AL. | |
| | Examiner | Art Unit | |
| | Lina Yang | 2665 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/25/2002.

2. ☒ The allowed claim(s) is/are 1-30.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).


a) ☐ All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.



**ALPUS H. HSU
PRIMARY EXAMINER**

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material

5. ☐ Notice of Informal Patent Application (PTO-152)

6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

DETAILED ACTION

1. This communication is in response to applicant's communication on 1/25/2002 .
Claims 1-30 are allowable.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lattig, Matthew on 12/05/2005.

The application has been amended by the examiner and the applicant as the following.

Claim 1 lines 7 and 8:

"the computed attenuation values" has been replaced by ***"the provided attenuation values"***, for correcting 35 USC 112 second paragraph issue .

Claim 17 line 1:

"claim 13" has been replaced by ***"claim 16"***, for correcting wrong dependency.

Allowable Subject Matter

3. Claims 1-30 are allowed.

The following is an examiner's statement of reasons for allowance.

The subject matter of claims 1-17 is allowable over prior art of record, because all prior arts fail to teach or suggest a method of attenuating downlink transmit power to transmit a frame of data in a wireless network, each frame composed of timeslots, each timeslot composed of quarter symbols, comprising: (a) ***mapping each quarter symbol of a frame to an offset within a frame attenuation buffer***, (b) computing a template for the frame; (c) ***providing attenuation values for each quarter symbol, the provided attenuation values being grouped in blocks; (d) recursively copying blocks of attenuation values into the frame attenuation buffer based on the template; and (e) attenuating transmit power of the frame based on contents of the frame attenuation buffer***, as recited in the claims.

The subject matter of claims 18-30 is allowable over prior art of record, because all prior arts fail to teach or suggest an apparatus for attenuating downlink transmit power to transmit a frame of data in a wireless network, each frame composed of timeslots, each timeslot composed of quarter symbols, comprising: a buffer for storing attenuation values to be used in attenuating transmit power of the frame; ***a processor for mapping each quarter symbol to an offset within the buffer, for computing a template to be used for filling the buffer, for providing attenuation values for each***

quarter symbol in the buffer, the provided attenuation values being grouped in blocks, and for recursively copying blocks of attenuation values into the buffer based on the template; and a controller for outputting contents of the buffer to attenuate transmit power of the frame, as recited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ostman et al. (U.S. Patent No. 6,529,494 B1) discloses a method and an apparatus to improve the performance of a TDMA based cellular radio telecommunications system by adjusting the transmit power associated with certain downlink signals during a corresponding timeslot, and in such a way that the power adjustment resembles that of a typical fading event, in terms of both time of occurrence and rate of occurrence (e.g., dB per msec).

Hagerman et al. (U.S. Patent No. 6,539,010 B1) discloses a radio communication method and system that facilitate half-rate communications as well as downlink power

control and selective beam transmission. Data associated with two terminals is multiplexed into a single timeslot. A first terminal's data occupies a first portion of the timeslot, while the second terminal's data occupies a second portion of the timeslot. A synchronization/training field may separate the first and second portions of the timeslot. In this way, a base station can change the power level and/or direction of transmission of the different terminal's data even though that data is multiplexed together on the same timeslot.

Cheng et al. (U.S. Patent No. 6,411,817 B1) discloses a method for controlling downlink power in a time-division multiplex wireless system by providing different downlink transmit signal powers to different time-division multiplex channels of a single carrier. A base station receives a measured signal parameter data for a downlink transmit signal of a time-division multiplex channel. The base station determines an initial adjustment for the downlink transmit signal power of the time division multiplex channel if the measured signal parameter data differs from a target signal parameter data. The base station determines a revised adjustment for the downlink transmit power of the time division multiplex channel based on the initial adjustment and at least one adjustment range as appropriate to achieve synchronization of the demodulation of the downlink transmit signal.

Hwang et al. (U.S. Patent No. 6,725,054 B1) discloses an apparatus and method by generating and transmitting a forward power control command for providing the

forward power control, and performing forward power control in a mobile communication system. According to the forward power control method, a power control command is generated based on a received frame including a plurality of slots each of which includes power control bits. The ratio of the power control bit energy to noise energy, which is given by a ratio of the accumulated energy of the power control bits in the slots of the received frame to an accumulated energy value of noise in the slots of the received frame, is provided, and the power control command based on a ratio of the accumulated energy value of traffic symbol bits in the slots to the accumulated energy value of the power control bits is generated when the provided ratio of the power control bits to noise is acceptable.

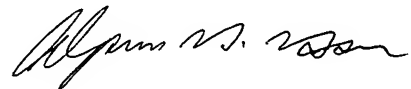
Art Unit: 2665

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571)272-3151. The examiner can normally be reached Monday through Wednesday between 7:00 a.m. and 7:30 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 517-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



ALPUS H. HSU
PRIMARY EXAMINER